**PURDUE UNIVERSITY**  
**REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE**  
**(10000-40000 LEVEL)**

**DEPARTMENT**: Biomedical Engineering  
**EFFECTIVE SESSION**: Fall 2011

**INSTRUCTIONS**: Please check the items below which describe the purpose of this request.

- [ ] 1. New course with supporting documents  
- [ ] 2. Add existing course offered at another campus  
- [ ] 3. Expiration of a course  
- [ ] 4. Change in course number  
- [ ] 5. Change in course title  
- [ ] 6. Change in course credit/typy  
- [ ] 7. Change in course attributes (department head signature only)  
- [ ] 8. Change in instructional hours  
- [ ] 9. Change in course description  
- [ ] 10. Change in course requisites  
- [ ] 11. Change in semesters offered (department head signature only)  
- [ ] 12. Transfer from one department to another

**PROPOSED**:  
- Subject Abbreviation: BME  
- Course Number: 29000  
- Long Title: Frontiers in Biomedical Engineering  
- Short Title: Frontiers in BME

**EXISTING**:  
- Subject Abbreviation:  
- Course Number:  
- Long Title:  
- Short Title:  

**TERMS OFFERED**:  
- [ ] Summer  
- [ ] Fall  
- [ ] Spring

**CAMPUS(ES) INVOLVED**:  
- [ ] Calumet  
- [ ] Cont Ed  
- [ ] Ft. Wayne  
- [ ] Tech Statewide  
- [ ] W. Lafayette

**CREDIT TYPE**  
- 1. Fixed Credit: Cr. Hrs. __________  
- 2. Variable Credit Range: Minimum Cr. Hrs. __________  
- Maximum Cr. Hrs. __________

**Schedule Type**  
- Lecture  
- Recitation  
- Presentation  
- Laboratory  
- Lab Prep  
- Studio  
- Distance  
- Clinic  
- Experiential  
- Research  
- Ind. Study  
- Pract/Observ

**Minutes Per Mtg**  
- 50

**Meetings Per Week**  
- 1

**Weeks Offered**  
- 16

**% of Credit Allocated**  
- __________

**COURSE ATTRIBUTES**: Check All That Apply  
- 1. Pass/Not Pass Only  
- 2. Satisfactory/Unsatisfactory Only  
- 3. Repeatable  
- 4. Credit by Examination  
- 5. Special Fees  
- 6. Registration Approval Type:  
  - Department  
  - Instructor  
- 7. Variable Title  
- 8. Honors  
- 9. Full Time Privilege  
- 10. Off Campus Experience

**COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):**  
Major Restriction: BME Only. This course introduces the rapidly emerging field of biomedical engineering by exposing students to a wide range of research activities in the Weldon School and to a variety of experiential learning opportunities. Topics addressed include career paths, professional development opportunities, and career development skills including creating a plan of study, information, and job interviewing, writing a resume, technical writing, preparing effective oral presentations, and peer-editing.

**COURSE LEARNING OUTCOMES:**  
A student who successfully fulfills the course requirements will have demonstrated: an ability to independently acquire knowledge from a variety of sources, an ability to communicate effectively in written form, an ability to identify and describe contemporary issues impacting Biomedical Engineers, and an ability to identify and pursue a career development pathway that is relevant to their personal identity and their training as Biomedical Engineers

**OFFICE OF THE REGISTRAR**
TO: The Faculty of the College of Engineering
FROM: The Faculty of the School of Biomedical Engineering
RE: New Undergraduate Course, BME 29000, Frontiers in Biomedical Engineering

The Faculty of the School of Biomedical Engineering has approved the following new course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**BME 29000  Frontiers in Biomedical Engineering**
Term offered: Fall, Lecture 1, Cr. 1
Restriction: Must be enrolled in the School of Biomedical Engineering (BME)

**Description:** This course introduces the rapidly emerging field of biomedical engineering by exposing students to a wide range of research activities in the Weldon School and to a variety of experiential learning opportunities. Topics addressed include career paths, professional development opportunities, and career development skills including creating a plan of study, informational and job interviewing, writing a resume, technical writing, preparing effective oral presentations, and peer-editing.

**Reason:** This new course will be a required course for the undergraduate program in the Weldon School of Biomedical Engineering (BME). We feel it addresses a current need to expand the understanding and practical skills associated with professional development at an early stage. The course is structured to build on the FYE curriculum and to link with several other design and professional skills courses within the BME curriculum. This course will serve also as the introduction to the field of biomedical engineering allowing first semester sophomores to become more integrated into the School and prepare for internship opportunities. Currently there are no existing competing courses at Purdue that address these BME-specific topics.

The course has been taught 3 times previously as an experimental course. The course has been strongly recommended for all BME sophomores and will be required in the future.

George R. Wodicka, Professor and Head
Weldon School of Biomedical Engineering

APPROVED FOR THE FACULTY
OF THE SCHOOLS OF ENGINEERING
BY THE ENGINEERING
CURRICULUM COMMITTEE

ECC Minutes  
Date  
Chairman ECC
BME 29000 – Frontiers in Biomedical Engineering

Time / Location: Fall Semester, 50 minutes, once weekly
Credit: 1
Restriction: BME only; sophomore standing

Instructors: Kinam Park, Professor
Maeve Drummond, Undergraduate Programs Coordinator

Teaching Assistants: TBD

Required texts:

Assessment: Grading is based on individual written reports and plans, peer-editing, and participation in group discussions. Each attendance and assignment is worth a point value and total accumulated points will determine the course grade. Occasionally in-class quizzes and surveys may be administered, but there are no written exams.

Graded Assignments:
- Attendance (150 pts)
- Plan of Study (50 pts)
- Resume and Cover Letter (50 pts)
- Informational Interview (100 pts)
- Career Development Report (150 pts)

Bonus Points:
  a) 10 points for completing the end-of-year survey and
  b) 1 point for each BMES club session attended (up to 10)

Grading Scale:
100-97% = A+
96-93% = A
92-90% = A-
89-87% = B+
86-83% = B
82-80% = B-
79-77% = C+
76-73% = C
72-70% = C-
69-67% = D+
66-63% = D
62-60% = D-
Below 60% = F
BME 290 Fall 2010
MJIS 1001 4:30-5:20 Thursdays

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